

**APRIL/MAY 2024**

**23UECP13A — PROGRAMMING IN C**

**Time : Three hours**

**Maximum : 75 marks**

**SECTION A — (10 × 2 = 20 marks)**

**Answer ALL questions.**

1. What are the importance of C?
2. What does void main (void) mean?
3. What is called a program?
4. Define variable.
5. What are the two classifications of loops?
6. How do you initialize arrays during declaration?
7. Write the function for comparing two strings.
8. What is the use of recursive function?
9. Differentiate arrays and structures.
10. What is bit field?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Illustrate the overview of a C program.

Or

- (b) Explain the compiler control pre-processor directives.

12. (a) Discuss the basic types of C constants.

Or

- (b) Explain the precedence of arithmetic operators in C.

13. (a) Demonstrate the switch statement.

Or

- (b) Discuss the functions used for character I/O.

14. (a) Write a C program to find the given string is palindrome or not.

Or

- (b) How do you pass array an argument to a function? Explain.

15. (a) Explain how the structures and unions differ the implementation.

Or

- (b) Discuss the importance of pointers in C.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss the steps involved in executing a C program.

17. Explain the different classes of data types.

18. Write a program to read a matrix of size  $m \times n$  and find the minimum and maximum values form the above matrix and print the matrix in matrix form.

19. Explain the basic elements of user-defined functions.

20. Write a C program to defined a structure data types named date containing three integer numbers day, month and year and using the above read two dates and then compare the dates whether two dates are equal or date 1 is earlier then date 1 later date.